

Supplementary Table 4a: Relationship in time of peak expression of clock genes within the tissue in reference to *Per2* acrophase

| Gene | Hypo | | | Pineal | | | Retina | | |
|-------|------|-------|-------|--------|-------|-------|--------|-------|-------|
| | June | Sep | Dec | June | Sep | Dec | June | Sep | Dec |
| Bmal1 | -7.7 | -9.9 | -8.0 | -8.4 | -9.4 | 11.5 | -8.9 | 9.7 | 11.5 |
| Clock | 10.3 | -4.9 | -8.2 | -11.1 | -4.3 | -10.5 | -6.5 | -7.2 | -11.1 |
| Npas2 | 8.7 | -4.5 | 11.6 | 6.8 | -9.5 | -10.3 | -6.0 | 9.2 | 11.2 |
| Cry1 | 9.5 | -10.2 | -10.1 | 11.4 | -10.1 | -7.4 | -4.4 | -10.5 | -11.1 |

Supplementary Table 4b: Relationship in time of peak expression of clock genes between tissues in reference to hypothalamus

| Gene | Pineal | | | Retina | | |
|-------|--------|------|------|--------|------|------|
| | June | Sep | Dec | June | Sep | Dec |
| Bmal1 | -9 | -2.2 | -4.6 | -2.2 | -3.7 | -3.1 |
| Clock | 1.5 | -2.1 | -2.4 | 2.2 | -1.6 | -1.5 |
| Npas2 | -3 | -7.7 | 2 | 4.3 | -9.6 | 1.0 |
| Per2 | -1.1 | -2.7 | -0.1 | -5.0 | 0.7 | 1.4 |
| Cry1 | 0.8 | -3.2 | 2.6 | 5.1 | 0.4 | 0.4 |

Supplementary Table 4c: Acrophase of clock genes in urban birds in three central tissues at three time of the year with reference to rural birds

| Gene | Hypo | | | Pineal | | | Retina | | |
|-------|------|------|------|--------|------|------|--------|------|------|
| | June | Sep | Dec | June | Sep | Dec | June | Sep | Dec |
| Bmal1 | 0 | 3.1 | 2.2 | 2.6 | 4.6 | 0.3 | 2.2 | 2.0 | 1.6 |
| Clock | -2.4 | -3.3 | -0.7 | -1.6 | -1.7 | -4.8 | -4.5 | -1.7 | -0.8 |
| Npas2 | 5.2 | -0.7 | 2.5 | 0.4 | 4.6 | 0.3 | 3.5 | 7 | 0.1 |
| Per2 | 1.1 | 1.0 | 3.5 | 0.3 | 4.3 | 1.6 | 2.8 | 1.4 | 2.4 |
| Cry1 | 1.2 | 0.7 | 0.7 | 4.4 | 4.2 | -0.4 | -0.4 | 2.5 | -0.6 |

Supplementary Table 4d: Acrophase of clock genes during June and December in rural birds with reference to September month

| Gene | Hypo | | | Pineal | | | Retina | | |
|-------|------|------|-----|--------|------|-----|--------|-----|------|
| | June | Dec | Sep | June | Dec | Sep | June | Sep | Dec |
| Bmal1 | 3.6 | 2.3 | | -3.2 | -0.1 | | 5.1 | | 2.9 |
| Clock | -7.4 | -2.3 | | -3.7 | -3.2 | | -3.6 | | -2.8 |
| Npas2 | -9.4 | -7.5 | | -4.7 | 2.2 | | 4.5 | | 3.1 |
| Per2 | -1.4 | -0.4 | | 3 | 3 | | -4.3 | | 1.1 |
| Cry1 | -2.9 | 0.5 | | 1.1 | 6.3 | | 1.8 | | 0.5 |